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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,422	03/26/2004	Tetsurou Tayu	023971-0381	7843

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EXAMINER	
SHEEHAN, JOHN P	

ART UNIT	PAPER NUMBER
1742	

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/809,422	TAYU ET AL.	
	Examiner	Art Unit	
	John P. Sheehan	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-17 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-17 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 26 March 2004 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date March 26, 2004.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 to 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

I. In claims 1 to 13 and 17 it is not clear exactly what it is that applicants are attempting to claim. For example, claim 1 is directed to "A rare earth magnet" yet the balance of the claim requires merely rare earth magnet particles and a rare earth oxide among the rare earth magnet particles. Thus, the claims merely recite a mixture of rare earth magnet particles and a rare earth oxide, that is, a loose mixture of particles of rare earth magnet particles and rare earth oxide particles. It is not clear how such a mixture of particles can be described as a magnet.

II. In claims 14 to 16 it is not clear what the meaning is of the term, "forming the mixture" (claim 14, the last line). For example, this phrase merely means forming a mixture by mixing the mixture components. However, this step has already taken place in lines 2 and 3 of claim 14. What mixture is formed in the last line of claim 14?

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1 to 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over each of Ghandehari (US Patent No. 4,762,574), Japanese Patent Publication No. 2002-064010 (Japan '010) or Japanese Patent Publication No. 2000-082610(Japan '610).

NOTE: Each of Japan '010 and Japan '610 was cited in the IDS submitted March 26, 2004, all references by the Examiner to Japan '010 and Japan '610 are based on the machine translations attached to this Office action.

Each of the references teaches making a rare earth-iron-boron permanent magnet by mixing a rare earth-iron-boron powder with a rare earth oxide, aligning the powder mixture in a magnetic filed, compacting the powder mixture and sintering (Ghandehari, column 4, Example 1; Japan '010, page 2, paragraphs 0012 and 0013; and Japan '610, page 2, paragraphs 0018, 0019 and 0029 to 0032). This process

taught by each of the references is the same process as recited in applicants' process claims 14 to 16 and the resulting product appears to be the same as recited in applicants' claims 1 to 13. Each of the references teaches that the disclosed permanent product can be used in an electric motor as recited in applicants' claim 17 (Ghandehari column 1, lines 15 to 17; Japan '010, page 1, paragraph 0001; and Japan '610, page 1, paragraph 0001). Japan '610 teaches that adding the rare earth oxide to the rare earth permanent magnet powder increases the resistivity of the finished permanent magnet (Abstract).

The claims and the references differ in that the references exemplify only R_2O_3 rare earth oxides while the claims recite rare earth oxides having the formula,

$$R_{2x}R'_{2(1-x)}O_3.$$

However one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because as drafted the claims encompass the embodiments wherein R and R' are the same, which means the claims encompass rare earth oxides having the formula R_2O_3 as taught by each of the references. Further, each of the references teaches the use of rare earth oxides in general and therefore are considered to teach all rare earth oxides including those having the formula, $R_{2x}R'_{2(1-x)}O_3$ as recited in applicants' claims.

Double Patenting

Claims 1 to 17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 8 of

copending Application No. 10/600,602 (Publication No. US 2004/0000359 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because the only difference between these sets of claims is that the instant claims recite $R_{2x}R'_{2(1-x)}O_3$ as the rare earth oxide to be used while the claims of 10/600,602 recite R_2O_3 as the rare earth to be used. However one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because as drafted the claims of the instant application encompass the embodiments wherein R and R' are the same, which means the claims encompass rare earth oxides having the formula R_2O_3 as recited in the claims of 10/600,602.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1 to 17 are directed to an invention not patentably distinct from claims 1 to 8 of commonly assigned 10/600,602. Specifically, the only difference between these sets of claims is that the instant claims recite $R_{2x}R'_{2(1-x)}O_3$ as the rare earth oxide to be used while the claims of 10/600,602 recite R_2O_3 as the rare earth to be used. However one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because as drafted the claims of the instant application encompass the embodiments wherein R and R' are the same, which means the claims encompass rare earth oxides having the formula R_2O_3 as recited in the claims of 10/600,602.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP

§ 2302). Commonly assigned 10/600,602, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

6. A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

7. Claims 1 to 17 are provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/6002,600 which has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if published or patented. This provisional rejection under 35 U.S.C. 103(a) is based upon a presumption of future publication or patenting of the conflicting application. This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application

under 37 CFR 1.131. For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John P. Sheehan
Primary Examiner
Art Unit 1742

jps